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ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR 0810 A US 6783 10/800,154 03/13/2004 Johann Jackel EXAMINER 11/08/2005 20676 7590 **ALFRED J MANGELS** BINDA, GREGORY JOHN 4729 CORNELL ROAD ART UNIT PAPER NUMBER CINCINNATI, OH 452412433 3679

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		10/800,154	JACKEL ET AL.
		Examiner	Art Unit
		Greg Binda	3679
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).			
Status			
1)⊠	Responsive to communication(s) filed on <u>26 September 2005</u> .		
,	•	action is non-final.	
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
<ul> <li>4) Claim(s) 1-20 is/are pending in the application.</li> <li>4a) Of the above claim(s) 11,13-17 and 19 is/are withdrawn from consideration.</li> <li>5) Claim(s) is/are allowed.</li> <li>6) Claim(s) 1-10,12,18 and 20 is/are rejected.</li> <li>7) Claim(s) is/are objected to.</li> <li>8) Claim(s) are subject to restriction and/or election requirement.</li> </ul>			
Application Papers			
9) ☐ The specification is objected to by the Examiner.  10) ☐ The drawing(s) filed on 13 March 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119			
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>			
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152) Paper No(s)/Mail Date			

### Election/Restrictions

1. Applicant's election with traverse of Species I shown in Figs. 1 & 2 in the reply filed on September 26, 2005 is acknowledged. The traversal is on the ground(s) that independent claim 1 is generic so therefore examination of all claims in the application should be appropriate. This is not found persuasive because it does address the patentably of any one of the species with regard to each of the other species. Thus applicant has failed to submit valid grounds for overcoming the election requirement. See MPEP § 808.01(a).

The requirement is still deemed proper and is therefore made FINAL.

- 2. Claims 11, 13-17 & 19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.
  - a. Claim 11 does not read on the elected species. Instead its limitations read only on an unelected species. See paragraph 0044.
  - b. Claim 19 does not read on the elected species. Instead its limitations read only on an unelected species. See paragraph 0043.

### Drawings

3. The drawings are objected to because they contradict each other. Fig. 1 shows the coupling elements 22 & 26 extend radially inward of the rivet 30, but Fig. 2 shows the coupling element 33 extends only to a point just above the location of the rivet...

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4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Specification

- 5. The disclosure is objected to because:
  - a. The abbreviation "U. S." is misspelled at page 7, line 12.
  - b. Page 8, lines 1 & 2 describes the springs 7 & 8 as extending over an arc of less than 90 degrees, but Fig. 1 shows each of the springs extending over arcs that are greater than 90 degrees.
  - c. In paragraph 0038 the coupling elements 22 & 26 are described as being centered by the rivets 30. Since the rivets 30 pass through holes in the support 20, the coupling

elements must therefore be fixed to the support 20. However, in paragraph 0042 the carrier elements 23 & 27 of the coupling elements 22 & 26 are described as being rotatable relative to the support 20. The coupling elements cannot be both fixed and rotatable relative to the support 20.

6. The specification is objected to as failing to provide proper antecedent basis for the subject matter in claims 12, 18 & 20.

# Claim Objections

7. Claim 18 is objected to because it requires differentiation in fonts in order to be understood. See in line 2 where the letter "a" is italicized in order to set it apart as a numeric variable instead of a word. However, no such differentiation in fonts is going to appear in a patent issuing from this application.

## Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 6-10 & 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described

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in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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- a. Claim 6, recites the limitations, "one first entraining member . . . is in motion-transmitting engagement with one of said energy storing elements" while a second entraining member is merely "in engagement with another of said energy storing elements". However, the specification fails to explain the difference between "motion-transmitting engagement" and non-specific "engagement" and also fails to teach how the differentiation in engagements is accomplished.
- b. Claim 7 recites that a disc-shaped carrier element is provided for EACH of the first and second entraining members. However, in the specification at paragraphs 0036 & 0040, a single disc-shaped carrier element 23 is provided for BOTH the first and second entraining members 25 & 24.
- c. Claim 8 recites that the carrier elements are "turnable relative to" the support..

  However, in the specification at paragraph 0038, the carrier elements 23 & 27 appear to be fixed to the support 20. See also item 5c above.
- d. Claim 9 recites that the flange is coupled to at least one of the energy storing elements. However, the specification teaches in paragraph 0035 that the flange 20 is coupled to one of the components 2, 3, not one of the energy storing elements 7, 8.
- e. Claim 10 recites that at least one of the carrier elements is centered relative to the support. However, no where in the specification are the carriers 23 & 27 described as being centered relative to the support 20. Paragraph 0038 mentions, without explanation,

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that the carriers are centered by the rivets 30, but said centering is not described as being relative to the support 20.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 11. Claims 6-10, 12 & 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - a. Claim 6, recites the limitations, "one first entraining member . . . is in motion-transmitting engagement with one of said energy storing elements" while a second entraining member is merely "in engagement with another of said energy storing elements". However, in the present invention, it is not clear how "motion-transmitting engagement" differs from the recited non-specific "engagement".
  - b. Claim 18 recites that the energy storing elements extend along an arc of 90 degrees (see also page 8, lines 1 & 2 of the description). But it is not clear by what standard claimant is measuring 90 degrees. The arcs of the springs 7 & 8 in Fig. 1 appear to be much closer to 180 degrees, not 90 degrees.

### Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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- 13. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Owen, US 958,274. Figs. 1-4 show a torsional vibration damper comprising: a plurality of components 5 & 6 rotatable relative to each other about a common axis; at least two deformable energy storing elements, arcuate coil springs 27, arranged to yieldably oppose rotation of the components relative to each other; and means 10 for coupling the energy storing elements to each other for controlled entrainment of one of the springs 27 in response to deformation of the other of the springs 27. Figs. 1 & 2 show the coupling means 10 includes: a first entraining member (the right half of the coupling 10) that is in motion-transmitting engagement with one of the springs 27; and a second entraining member (the left half of the coupling 10) that is in motion-transmitting engagement with the other of the springs 27.
- 14. Claims 1-6 & 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Wooldridge, US 2,300,720. Figs. 1-6 show a torsional vibration damper comprising: a plurality of ringshaped mass components 18 & 30 rotatable relative to each other about a common axis; at least two deformable energy storing elements, coil springs 50, 51, arranged to yieldably oppose rotation of the components relative to each other; and means 37 for coupling the energy storing elements to each other for controlled entrainment of one of the springs 50 in response to deformation of the other of the springs 51. Figs. 2, 4 & 5 show the coupling means 37 includes: a first entraining member 40 that is in motion-transmitting engagement with one of the springs;

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and a second entraining member 41 that is in motion-transmitting engagement with the other of the springs.

- 15. Claims 1-10 & 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kern et al, US 4,947,700. Figs. 2, 3 & 6 show a torsional vibration damper comprising: a plurality of ring-shaped mass components 50 & 72 rotatable relative to each other about a common axis; at least two deformable energy storing elements, coil springs 58, arranged to yieldably oppose rotation of the components relative to each other; and means 70 for coupling the energy storing elements to each other for controlled entrainment of one of the springs 58 in response to deformation of the other of the springs 58. Figs. 3 & 6 show the coupling means 70 includes: a first entraining member (one of the equalizers 70) that is in motion-transmitting engagement with one of the springs; and a second entraining member (the other of the equalizers 70) that is in motion-transmitting engagement with the other of the springs. Fig. 6 shows a substantially circular, disc-shaped carrier 70 for each of the entraining members.
- 16. Claims 1-7, 12, 18 & 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kono et al, US 6,371,857. Figs. 2, 4 & 5 show a torsional vibration damper comprising: a plurality of ring-shaped mass components 2 & 5 rotatable relative to each other about a common axis; at least two deformable energy storing elements, arcuate coil compression springs 30, arranged to yieldably oppose rotation of the components relative to each other; and means 140 for coupling the energy storing elements to each other for controlled entrainment of one of the springs in response to deformation of the other of the springs. Figs. 4 & 5 show the coupling

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means 140 includes: a first entraining member 142, 143 (at the uppermost projection 141) that is in motion-transmitting engagement with one of the springs 30; and a second entraining member 142, 143 (at the lowermost projection 141) that is in motion-transmitting engagement with the other of the springs 30. Fig. 5 shows a substantially circular, disc-shaped carrier element 140 for both of the first and second entraining members 142, 143. Fig. 4 shows the springs 30 each include a plurality of convolutions and that each entraining member 142,143 is disposed between two neighboring convolutions (see also "adjacent coils" in col. 6, line 54) of a spring. Fig. 4 shows each spring 30 extends along an arc that is approximately 90 degrees.

### Conclusion

- 17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reed shows a torsional damper.
- 18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Greg Binda

Primary Examiner Art Unit 3679